

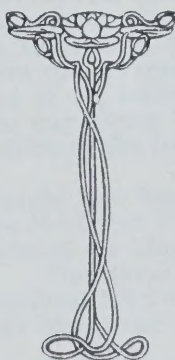
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Lethbridge Northern Irrigation District

Third Annual Report *... and ...* Financial Statement 1923



Issued to the Ratepayers by the Board of Trustees

THE LETHBRIDGE NORTHERN IRRIGATION DISTRICT

THIRD ANNUAL REPORT AND FINANCIAL STATEMENT = 1923 =

Trustees:

T. W. CROFTS E. H. HANN
T. H. WYMAN

Secretary-Treasurer:

G. H. DUNNING

Project Manager:

H. B. MUCKELSTON

REPORT OF TRUSTEES

To the Rate-payers, Lethbridge Northern Irrigation District:

The year just closed has been, in some respects, a very gratifying one. for Nature has been kind in blessing the country with the most abundant rainfall since 1916, and some wonderful crops have resulted. On the other hand, there have been a few disappointments, among the greatest of which was the failure of the market to reach a figure whereby the grower could realize much more than the bare cost of production. This condition, coupled with the fact that commodities of all kinds which the farmer is obliged to purchase, are still very close to war prices, has militated against the realization of the margin of profit which is the just due of every producer.

The completion of the system was the outstanding accomplishment in the progress of the Lethbridge Northern Irrigation District during the year 1923. The works were completed on May 1st, on schedule time, and the water admitted on May 2nd. The actual working time for construction occupied but two working seasons, which was the time estimated in the original report upon which was based the construction of the system.

Without going into too much detail, it may be well that a few aspects of the scheme be presented to the rate-payers and the public, in order that some idea may be had as to the results obtained in the disbursements of the capital realized from the sale of the debentures, and to form a basis of comparison with the cost of similar works elsewhere.

The Lethbridge Northern Irrigation District had its inception in the preliminary survey made in 1914. Through this survey sufficient information was made available to furnish a basis of calculation as to its feasibility. The latter aspect of the scheme was covered in a special report to the Provincial Government by Mr. George Anderson, with which report many of the rate-payers are more or less familiar

This report covered every phase of the proposed project, including natural features, construction data, and financial provisions. The construction cost calculation in the original estimate was \$40.12 per acre. The system was actually constructed at a cost of \$38.61, or \$1.51 less per acre than the original estimate, in spite of the fact that neither materials nor labor costs sank to a figure much below war prices, which decline had been anticipated in the estimate.

The final capital cost, which took into account interest on debentures and operation and maintenance for the first year, was calculated in the original estimate at \$51.26 per acre. The actual expenditure, including these items, was \$51.86 per acre. The apparent discrepancy is accounted for by the fact that the discount on the debentures was greatly in excess of the allowance made by Mr. Anderson by \$150,000.00, or nearly \$1.50 per acre.

It is estimated that it will require an additional \$95,000 capital for watermasters' and ditchriders' quarters, buildings for headquarters, telephone system, fencing and right-of-way, and in strengthening of the Main Canal banks near the headworks.

Not only was the work completed at a figure below the estimate, but the system is a much better one than was contemplated in the preliminary estimate, which did not cover the Kehoe Lake route. The betterments referred to are the result of the use of about three times the amount of concrete, which was used instead of wood in all structures of over 40 second-feet capacity, seven spans of steel over the Old Man River, instead of three, as originally contemplated; a large spillway on the Main Canal with two sets of gates, wood stave pipe siphons, creosote treated, at Rocky Coulee and Kenex, instead of common open wood flumes. In the smaller flumes a special composition rust-resisting metal was used, insuring a maximum life with a minimum of repair cost.

It is also worthy of note that the Board, upon the request of a large number of rate-payers, granted both material and labor for farm bridges across canals of over 5-foot bed-width, and the material only on for bridges for the smaller canals. The cost of these bridges was about \$28,000. This item was not included in the original estimate for construction.

Many of these betterments were found necessary because of physical conditions, and others were adopted because of the ultimate economy involved in a more permanent construction.

For purposes of comparison, the construction costs of various projects in the United States are given as reported in a prominent engineering journal in 1913 as follows:

Colorado, 18 projects, average cost	\$82.	per acre
Montana, 2 projects	50.	"
New Mexico, 1 project	50.	"
Oregon, 5 projects	57.80	"
South Dakota, 1 project	80.	"
Utah, 2 projects	60.	"
Washington, 8 projects	112.50	"

The above named projects were all built before the war at pre-war prices, and with capital at or near the par value. It may be seen that our own costs of \$51.86 per acre compares very favorably with that of other projects, when all features affecting the costs are taken into consideration.

At the request of the Irrigation Council the classification of materials encountered in excavation, made by the District engineers, was checked by Mr. H. G. Barber, an experienced construction man, and a report made to the Council. Mr. Barber's classification, though varying in several instances from that of the Engineers, when averaged over the whole work, was a confirmation of the classification made by the District Engineers. It

must be remembered, as was pointed out by Mr. Barber, that his opportunities for observation were not as good as were those of the engineers who classified the material while the excavation work was in progress.

Operation

The first season of operation of the system was destined to be a short one. On the first of June, shortly after the admission of water into the canals, an unprecedented flood occurred which destroyed a large section of the Main Canal bank in the Piegan Reservation, and by a change in the channel of the river, carried away a ninety-foot span of the flume across the Old Man River. A dragline machine was employed in reconstructing the canal banks, this work extending well up into September. The head-works were designed to carry a head of water equal to about 40,000 second-feet, the highest flood previously known, with an added margin for safety. In the flood of 1923 it was estimated by the Water Power Branch of the Federal Government that over 70,000 second-feet poured over the dam at the height of the flood. Had it not been that this structure was extremely well built the results would have been much more serious.

The forming of a new channel at the flume-crossing of the river necessitated the construction of another large pier of concrete, the completion of which involved much arduous labor in excavation, the handling of large quantities of boulders, the whole situation being aggravated by labor troubles as a result of the harvest season.

Water was admitted again on October 3rd, and continued until October 29th, when it was turned off for the winter. The entire cost of repairing the damage caused by the floods totalled \$81,535.67. It is estimated it will take \$6,000 more to make it perfectly safe.

The value of Keho Lake as a safety factor was demonstrated to a degree during the season just passed. Enough water was delivered to the lake in May, previous to the break, to furnish a supply to the farmers in the East end of the District until the last week in July. During May a total of 8136 acre-feet was discharged into Keho Lake. During October the Main Canal discharged a total of 13,388 acre-feet. For the season there were delivered approximately 21,524 acre-feet. At the end of the season there were left stored in the lake 1596 acre-feet.

Practically the entire system was tried out and with the exception of a few minor betterments was found to be adequate to the needs for which designed. In all 172 deliveries were made for irrigation and 75 for stock watering. About 6963 acres were irrigated and from 3000 to 3500 acre-feet were stored in stock-watering reservoirs.

Percolation through the canal banks was heavy in some localities where the material was largely gravel, particularly across the Piegan Reservation and for two or three miles beyond the river crossing. Opportunity was taken during the repair work to the system to line certain sections of the Main Canal banks with clay, so as to prevent as much loss of water as possible and seal the banks against future leakage as effectively as could be done.

A considerable loss of water must be expected for some time to come, until from continual use the banks will have become silted up. An improvement in this respect has already been noted in that portion of the Main Canal between the intake and Willow Creek, a distance of about 14 miles. During the short period in October, while the water was on, the rate of seepage was lowered about 24 per cent.

Finances

The capital received from the sale of debentures was exhausted with the November payment of interest. Negotiations are in progress with the Provincial Government whereby funds may be made available for operation

and maintenance for the coming year, pending the collection of rates. The rate will be struck in January, and become delinquent in December of the same year.

It is expected that the rate for 1924 will be about \$5.25 per acre. Of this amount \$3.75 will be made up of interest and exchange, and the balance of operation, maintenance and administration costs.

The Auditor's Report is appended herewith and will set forth the financial condition in detail.

Management

A change in Project Manager was made at the end of the year just passed; Major H. B. Muckleston, under whose direction the system was built, retiring, and Mr. P. M. Sauder taking over the position. Mr. Muckleston leaves the District with every reason to feel that satisfaction which comes with the fulfillment of a great trust well and honorably performed. The record of his achievement will be written in history as one of the great mile-stones of accomplishment in the progress of the Great Canadian West, and will no doubt redound to his credit in all his future undertakings.

Mr. Sauder, the new manager, has been with the District throughout the construction period, having come from the staff of the Commissioner of Irrigation, Reclamation Service. He takes up his new duties with a thorough knowledge of the District's affairs, and an intimate acquaintance with every feature in connection with the big system. He served as assistant Manager during the past year and had immediate supervision over the trying out of the canal system during that time. During his association with the work he has gained the confidence and respect of all with whom he has come in contact, and we have every reason to feel that the affairs of the District under his supervision will be well administered.

Colonization

It is no doubt apparent to all that the problem which looms largest in the future is that of settlement of the excess lands of the District. The Provincial Government, operating through the Irrigation Council, has this work in hand and have already spent much preliminary effort in the way of advertising of the District in the hope of attracting settlers from the United States. Economic conditions there have not been such as to result in the releasing of prospective settlers in any volume. Those who own farms are, due to the slump in the agricultural industry, unable to dispose of their high-priced land to any advantage, and those who are renters have, during the past few years, been unable to accumulate sufficient capital to enable them to move. The funds for colonization are not a direct charge against the District and do not enter into our budget of expenses in any way.

Headquarters.

After a careful analysis of the situation with respect to location of headquarters, the Board in September passed a resolution naming the Village of Commerce as the site most suited for the Head Office. A number of things had to be taken into consideration, but the chief one is that of accessibility, both from the standpoint of the staff and that of the rate-payer. Computations were made to determine the exact irrigable-area centre of the District, and this point fell within a mile of the Village of Commerce. With the construction of the Kipp-Little Bow Railway a regular schedule will be maintained, both for freight and passengers, and with a few betterments to the principal trunk highways through the District, the headquarters will be easily accessible from all directions by automobile. This, together with water supply, electric lights, fuel, school, and other advantages, solves the problem as well as possible in a location not enjoying the facilities afforded by a city. However, owing to the lack of funds, and the inability to release present quarters, it was felt that it would not be advisable to take any action in the matter until 1924.

General Meetings

The general meetings in the District will be held this year at the same points as last year. The schedule is as follows: Turin Hall, January 28th, at 2 p.m.; Coalhurst. I. O. O. F. Hall, January 29th, at 8 p.m.; Hollandale Schoolhouse, January 30th, at 3 p.m.

The rate-payers are urged to attend these meetings in their respective communities and become informed upon any question pertaining to the District's affairs which may be of interest.

Short Course in Irrigation

You are also reminded of the short course in irrigation offered by the Dominion Government Experimental Farm at Lethbridge, beginning on January 28th, and continuing until February 8th. The problems connected with irrigation practice in all phases will be covered, as well as courses in stock and poultry raising. Though these courses are of necessity limited by the short time available, Mr. Fairfield is planning to jam every moment full of interest, and any rate-payers who can attend will surely feel that the time was profitably spent.

Respectfully submitted,

T. W. CROFTS,

E. H. HANN,

T. H. WYMAN,

Trustees.

REPORT OF THE SECRETARY

To the Board of Trustees:

Gentlemen:

With the completion of the last large construction contract in May of the past year, the business transacted in the office witnessed a decided falling off in volume. The office staff was accordingly reduced in June, and again in September, after the completion of the repair work, so that at the present time the work is handled by a staff of two men. If it is found that the volume of business is still further reduced during the coming year, a still further reduction in staff will, of course, be made. The preparation of the tax roll, notices to rate-payers, election of Trustees, together with the regular routine, all coming within the first two months of the year, will combine to tax the office force to more than normal capacity, but it is hoped that no increase in staff during that period will be necessary.

It was expected that in July the system of accounting would be changed to conform to the requirements of operation and maintenance, but when the wash-out occurred in June, necessitating the resumption of construction work and the cessation of water supply, the change was postponed until the end of the year. The new conditions to be met with under operation and maintenance have necessitated a complete reclassification of accounts; however, the structure of the system will remain practically intact, with the same form of record books in use, but the new system will require a greater number of supplementary records than the former system, with a consequent increase in detail work. I submit, for your information, some data which will afford some idea as to the extent of office activity in the features indicated:

Number of letters received	2268
Number of letters mailed	2071
Number of accounts examined for which cheques were issued	1608
Bulletins to Rate-payers	3052
Conferences with Rate-payers and others	482
Board Meetings attended	49
(The office also assumed the mailing out of the "Irriga- tion Review," at monthly intervals, to the Rate- payers.)	

During the year I had occasion to inspect the accounting systems, office equipment, and administrative machinery of two of the United States Reclamation Service Projects, and gained some useful information in connection therewith, but I am pleased to report that, in my opinion, the situation obtaining in our own office as covering practically every feature, compares very favorably with either, and in many respects is superior, and makes for better efficiency. The United States Reclamation Service is a colossal institution and is subject to a great deal of the red tape and complicated methods usually found in an organization of that magnitude.

Settlements for rights-of-way are well on toward completion, but a number are still held up on account of inability of the owners to deliver title, and in a few instances inability of locating and getting in touch with the registered owners. I am of the opinion that these cases should be disposed of in the near future, and I would advise that title be obtained under the provisions of the Irrigation Districts Act, and settlement made when conditions make it possible.

The financial condition at the present time is such that immediate steps must be taken to place the District in a position to carry on and perform the necessary functions in connections with the operation of the system. It is

possible, and in some cases advisable, to postpone some of the capital expenditure contemplated for future development, until such time as the current finances will sustain the outlay, but the operation expenses must be provided for in any event, and pending the collection of rates sufficient to cover these charges, arrangements must be made for the obtaining of an extension of credits from other sources.

By a systematic check of the assessment roll with the records in the Land Titles Office, the nomenclature was revised and brought down to date. Owing to a difference in the interpretation of the word "owner," the Act as revised differs from that under which the District was organized, and under which the first assessment was made. The present Act recognizes only the registered owner as responsible for the payment of rates. The tax notices will therefore be addressed to the registered owners in every case.

Respectfully submitted,

G. H. DUNNING,
Secretary.

AUDITOR'S REPORT

THE BOARD OF TRUSTEES AND MEMBERS,
The Corporation of the Lethbridge Northern Irrigation District,
Lethbridge, Alberta.

Sirs:

I have examined the Books and Vouchers of THE LETHBRIDGE NORTHERN IRRIGATION DISTRICT for the year ended 31st December 1923, and beg to report that the Balance Sheet attached hereto, as signed by me and forming part of this Report, is, in my opinion, properly drawn up so as to exhibit a true and correct view of the affairs of the District as at 31st December, 1923, according to the best of my information, the explanations given to me and as shown by the books of the District. All my requirements as Auditor have been complied with.

The intromissions of the Provincial Treasury Department in the funds of the District have been accepted upon the Statements furnished monthly by the Department and no further verification has been sought or obtained.

The Cash on Deposit at The Canadian Bank of Commerce, Lethbridge, has been verified by Certificate of the Bank. The funds of the District which were deposited with the Imperial Bank of Canada, Edmonton, have been entirely extinguished by requisitions made thereon during the year. The District is now indebted to the Provincial Treasury Department in the sum of \$52,680.80 on account of Advances made by the Department for the purpose of completing the payment of Bond Interest, which fell due on 1st November, last.

A Certificate has been obtained from the Solicitors to the District, Messrs. Shepherd, Dunlop & Rice, stating that the Titles to Land purchased under Right-of-Way Agreements are in their possession, with the exception of five parcels, the purchase monies for which they are still holding, pending clearance of the Titles.

An Inventory has been prepared comprising Field, Office and Draughting Room Equipment, and this has been brought into the Balance Sheet at fair market prices, giving effect to depreciation in every instance in which articles have been subjected to use or exposure. Stocks of Timber, Lumber and other Materials on hand have been dealt with in the same manner, and now appear in the Balance Sheet in the sum of \$20,950.20.

The whole of the Expenditure up to the 31st December, 1923, including the cost of repairs to Works necessitated by the damage done by the flood, has been charged to Capital Account.

It gives me pleasure to report further that the Accounts and other Records have been kept in a very satisfactory manner, displaying painstaking effort on the part of those engaged thereon.

The System of Accounting in operation is admirably adapted to furnish details of particular costs in any department with a minimum expenditure of time and labor.

Reported by

R. W. GARDNER,
Chartered Accountant,
Auditor to the District.

ABSTRACT STATEMENT OF EXPENDITURE ON PROJECT TO 31st DECEMBER, 1923.

	Expenditure 1923	As at 31st December 1922	As at 31st December 1923
CONSTRUCTION:			
Contracts	270,583.99	3,526,331.84	3,796,915.83
Right-of-Way	33,080.22	158,179.06	191,259.28
Miscellaneous	44,374.96	162,585.82	206,960.78
	348,039.17		4,195,135.89
LESS: Lumber and Material on Hand, as per Inventory.....	20,950.20		20,950.20
		\$327,088.97	\$4,174,185.69
ENGINEERING:			
Salaries	39,490.35	202,460.33	241,950.68
Field Supplies	4,356.49	52,857.16	57,213.65
Field Sundries	13,747.74	45,888.96	59,636.70
Draughting Supplies	296.28	3,786.54	4,082.82
Miscellaneous	5,917.48	8,949.72	14,867.20
	\$63,808.34	\$313,942.71	\$377,751.05
ADMINISTRATION:			
Printing, Stationery and Office Supplies	629.21	15,054.80	15,684.01
Miscellaneous Expenses	1,531.69	3,327.49	4,859.18
Trustees' Fees and Expenses	3,006.80	8,660.45	11,667.25
Miscellaneous	12,063.66	37,276.38	49,340.04
Alberta Government, (Treasury Department):	331,313.98	409,745.67	741,059.65
Bond Interest and Sundries		\$348,545.34	\$822,610.13
		\$474,064.79	
DEPRECIATION:			
Equipment—Field, Office and Draughting Room	2,460.10	11,063.16	13,523.26
	\$741,902.75	\$4,646,167.38	\$5,388,070.13
	15,709.16	205,701.49	221,410.65
DEDUCT: Interest Earned		71.00	71.00
Contractors' Deposits retained and applied to Engineering-Draughting Supplies	\$15,709.16	\$205,772.49	\$221,481.65
	\$726,193.59	\$4,440,394.89	\$5,166,588.48

STATEMENT NO. 1

BALANCE SHEET AS AT 31st DECEMBER, 1923

Debenture Funds

ASSETS

CIRCULATING:

Cash:

In Canadian Bank of Commerce	\$33,879.28	
Less: Cheques Unpresented	12,660.71	
		\$21,218.57

Sundry Debtors:

Right-of-Way Advances	1,417.35	
Engineers' Advances	425.75	
City of Lethbridge—Deposit	8.50	
Land Titles Office—Deposit	83.55	
Irrigation Council	250.79	
Miscellaneous	260.00	
		2,445.94
		\$23,664.51

GENERAL:

Deferred Charges to Construction:

Lumber and Other Material as per Inventory	\$20,950.20
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FIXED:

Equipment—Field:

As per Inventory	6,279.80
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Equipment—Office and Draughting Room:

As per Inventory	4,213.50
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Irrigation Project:

As per last Balance Sheet	\$4,440,394.89	
Added during year as per Appendix		
No. 1	726,193.59	
		5,166,588.48

Bond Discounts:

6.29 per cent. on issue of \$4,400,000.00....	276,760.00	
Deduct: Premium: 3 per cent. on issue		
of \$1,000,000.00	30,000.00	
		246,760.00
		5,423,841.78

\$5,468,456.49

STATEMENT NO. 1

BALANCE SHEET AS AT 31st DECEMBER, 1923
Debenture Funds

LIABILITIES

FLOATING:

Sundry Creditors:

Contract Retention Monies	\$15,696.82	
Contractors' Deposits	46.00	
Workmen's Compensation Board	32.87	
		15,775.69
Alberta Government, (Treasury Dept.)		52,680.80

FIXED:

Bonded Debt:

Due 1st November, 1951	5,400,000.00
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\$5,468,456.49

